

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT				
<b>APPLICATION FOR PERMIT TO DRILL</b>						1. WELL NAME and NUMBER Melesco 34-05-D4				
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT UNDESIGNATED				
4. TYPE OF WELL Oil Well      Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME				
6. NAME OF OPERATOR PETROGLYPH OPERATING CO						7. OPERATOR PHONE 208 685-7685				
8. ADDRESS OF OPERATOR 960 Broadway Avenue, Ste 500, Bosie, ID, 83703						9. OPERATOR E-MAIL ppowell@pgei.com				
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) FEE			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>				
13. NAME OF SURFACE OWNER (if box 12 = 'fee') Denmark L. Jensen						14. SURFACE OWNER PHONE (if box 12 = 'fee') 801-358-8689				
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee') 650 North 300 East, Pleasant Grove, UT 84062						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')				
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
20. LOCATION OF WELL		FOOTAGES		QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN		
LOCATION AT SURFACE		1890 FNL 526 FWL		SWNW	34	4.0 S	4.0 W	U		
Top of Uppermost Producing Zone		1890 FNL 526 FWL		SWNW	34	4.0 S	4.0 W	U		
At Total Depth		1890 FNL 526 FWL		SWNW	34	4.0 S	4.0 W	U		
21. COUNTY DUCESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 526			23. NUMBER OF ACRES IN DRILLING UNIT 40				
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 2500			26. PROPOSED DEPTH MD: 6850 TVD: 6850				
27. ELEVATION - GROUND LEVEL 6226			28. BOND NUMBER LPM4138153			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-8342				
<b>Hole, Casing, and Cement Information</b>										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
COND	20	14	0 - 55	5.0	Unknown	10.0	Class G	25	1.17	15.8
Surf	12.25	8.625	0 - 700	24.0	J-55 ST&C	10.0	Class G	227	1.17	15.8
PROD	7.875	5.5	0 - 6850	15.5	J-55 LT&C	10.0	Class G	486	1.92	12.5
							Class G	418	1.46	13.4
<b>ATTACHMENTS</b>										
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input checked="" type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
NAME Ed Trotter				TITLE Agent			PHONE 435 789-4120			
SIGNATURE				DATE 08/13/2012			EMAIL edtrotter@easilink.com			
API NUMBER ASSIGNED 43013516360000				APPROVAL   Permit Manager						

**CONFIDENTIAL**  
**EIGHT POINT DRILLING PLAN**  
**PETROGLYPH OPERATING COMPANY, INC**  
**MELESCO 34-05-D4**  
**SW NW, SEC 34, T4S, R4W**  
**DUCHESNE COUNTY, UTAH**

**1. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:**

Formation		Subsea	MD
Rig KB=15' above GGL		6241	0
Surface Formation = Uinta			
Uinta		6226	15
Green River		4785	1456
Trona		3425	2816
Mahogany Shale		3255	2986
"B" Marker	Waterflood Unit Interval	2098	4143
"X" Marker		1600	4641
Douglas Creek Marker		1465	4776
"B" Limestone		1060	5181
Base Castle Peak Limestone		493	5748
BSCARB		108	6133
Wasatch		-170	6411
Rig TD		-609	6850

**2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:**

Substance	Formation	SUBSEA	MD
Base of moderately saline ground water*	Uinta	5540	701
Oil/Gas	Douglas Creek	1465	4776
Oil/Gas	Castle Peak	493	5748
Oil/Gas	Wasatch	-170	6411

Any water encountered during drilling shall be sampled, analyzed and reported using State of Utah DOGM Form 7 *Report of Water Encountered during Drilling*. The following analyses shall be performed on any water encountered:

Flow rate (or blowtest)	Temperature	pH	TDS
Dissolved Iron	Dissolved Magnesium	Dissolved Bicarb.	Dissolved Sulfate
Dissolved Calcium	Dissolved Sodium	Dissolved Carbonate	Dissolved Chloride

All depths through the "Base of moderately saline ground water"\*, along with any water encountered below that depth which is less than 10,000 TDS, shall be protected by the surface casing or by lifting the cement of the production casing into the surface casing.

\*Base of Moderately Saline Groundwater from Howells, Longson and Hunt, 1981, Utah State Technical Publication 92: The Base of the Moderately Saline Water in the Uinta Basin, Utah

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**3. PROPOSED CASING PROGRAM:**

String	Hole	Casing	Top - MD	Bottom - MD	Weight lb/ft	Grade	Thread
Conductor	20"	14"	surface	55'	steel	Cond'r	none
Surface	12-1/4"	8-5/8"	surface	700'	24	J-55	STC
Production	7-7/8"	5-1/2"	surface	6850'	15.5	J-55	LTC

String	Hole	Casing	Collapse	Burst	Tensile
Surface	12-1/4"	8-5/8"	1,370 psi	2,950 psi	214,000 lb
Production	7-7/8"	5-1/2"	4,040 psi	4,810 psi	248,000 lb

- All casing will be new or inspected.
- The surface and production strings shall have a minimum of one (1) centralizer on each of the bottom three (3) joints.
- The production string shall have a minimum of one (1) centralizer for every three (3) joints from TD to the top of the "B" marker at 4143' MD.

**4. PROPOSED CEMENTING PROGRAM:**

String	Top Bottom	Cement Description	Sacks Vol (ft <sup>3</sup> )	Excess	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
Conductor	0 55	Construction Grade Cement	Sufficient volumes to grout Conductor			
Surface	0 700	Class G +2% CaCl <sub>2</sub> +0.25 lb/sk Cello Flake	321 376	30%	15.8	1.17
Production Lead	0 4143	EXPANDACEM (Class G +additives) + 1 lb/sk Granulite TR¼ (LCM)	486 933	30%	12.5	1.92
Production Tail	4143 6850	EXPANDACEM (Class G +additives) + 1 lb/sk Granulite TR¼ (LCM)	418 610	30%	13.4	1.46

- The 8-5/8" surface casing shall be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.
- The 5-1/2" production casing shall be cemented back to surface. In the event that during the primary cementing operation the cement does not circulate to surface, a remedial cementing operation shall be performed only if necessary to lift cement above the Surface Casing Shoe at 700' MD.

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**5. MINIMUM PRESSURE CONTROL AND SAFETY EQUIPMENT:**

- An 8", 2000 PSI, Double Ram BOPE with Hydraulic Closing Unit shall be used.
- A 2000 PSI Working Pressure Annular shall be used.
- The flowline shall have a minimum diameter of 10".
- Auxiliary equipment shall be a Kelly Cock, Bit Float, and a TIW valve with drill pipe threads.
- Spark arrestors shall be equipped on all engine exhausts within 100 feet of the wellbore.
- See attached 2,000 psi BOP schematic diagram.

**BOPE TESTING PROCEDURE:**

- The BOPE shall be tested by a professional tester to conform to the standards of Federal Onshore Order #2.

**6. MUD PROGRAM:**

**A. SURFACE HOLE**

- The surface hole will be drilled with an air/mist system from 0' to 700'. All cutting shall be directed to pit.
- A trailer-mounted compressor with a capacity of 2000 CFM will be used. Compressor will have a safety shut-off valve located less than 15 feet from the driller's controls of the rig.
- The rat and mouse holes will be drilled with the air rig after surface casing is cemented.
- The 140 barrel water truck used with the deduster will be the source of kill fluid in the highly unlikely event of pressure being encountered during drilling of the surface hole.
- Operator will use air drilling techniques only on the surface hole.
- Operator plans to conform to the standards of Federal Onshore Order 2 for drilling. Operator may vary from the standards of Onshore Order 2 part E during drilling of the surface hole:
  - Operator may use a blooie line discharge 75' from the well bore instead of the Federal standard of 100' due to reduced drilling pad size.
  - Operator will have a mister on the end of the blooie line instead of an automatic igniter or continuous pilot light on the blooie line.
  - Operator's compressors will be located approximately 75' from the wellbore due to reduced location size. Compressors will be sited as close as is reasonable to the opposite direction of the blooie line discharge.
  - Operator will use an air bowl on the diverter system in place of BOPE.

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**B. PRODUCTION HOLE**

- The production hole shall be drilled with a freshwater polymer system from 700' to 6850'. LSND mud if conditions warrant.
- Clay inhibition and hole stability shall be achieved with a Diammonium Phosphate (DAP) additive or similar source of clay-stabilizing ions. Anticipated mud weight is 8.3-8.4 lbs/gal.
- All cuttings and circulating medium shall be directed into the reserve pit. Total Dissolved Solids (TDS) are anticipated to be less than 3000 PPM.
- Sufficient mud inventory will be maintained on location in either tanks or the reserve pit during the drilling of the production hole to handle any adverse conditions that may arise.
- If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite. Enough material shall be maintained on location to allow for the mudweight to be raised to 10.5 lbs/gal should need arise.
- During drilling operations, pit levels and flow from the well shall be monitored by instrumentation to include at least: a pit volume totalizer (PVT), a stroke counter, and a mud-flow indicator.
- A mud-gas separator shall be available on location.

**C. HAZARDOUS MATERIALS AND POLLUTANTS**

- Chromate additives **shall NOT** be used in the mud system without prior DOGM approval to ensure adequate protection of freshwater aquifers.
- Chemicals subject to reporting under SARA Title III in an amounts equal to or greater than 10,000 pounds annually **shall NOT** be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of this well.
- Extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities **shall NOT** be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of this well.
- Hazardous substances specifically listed by the EPA as a hazardous waste, as defined in 40 CFR 261 (D), or any substances that through their use would lead to the generation of a hazardous waste, **shall NOT** be used in association with the drilling, testing, or completion of this well.



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**7. EVALUATION PROGRAM:**

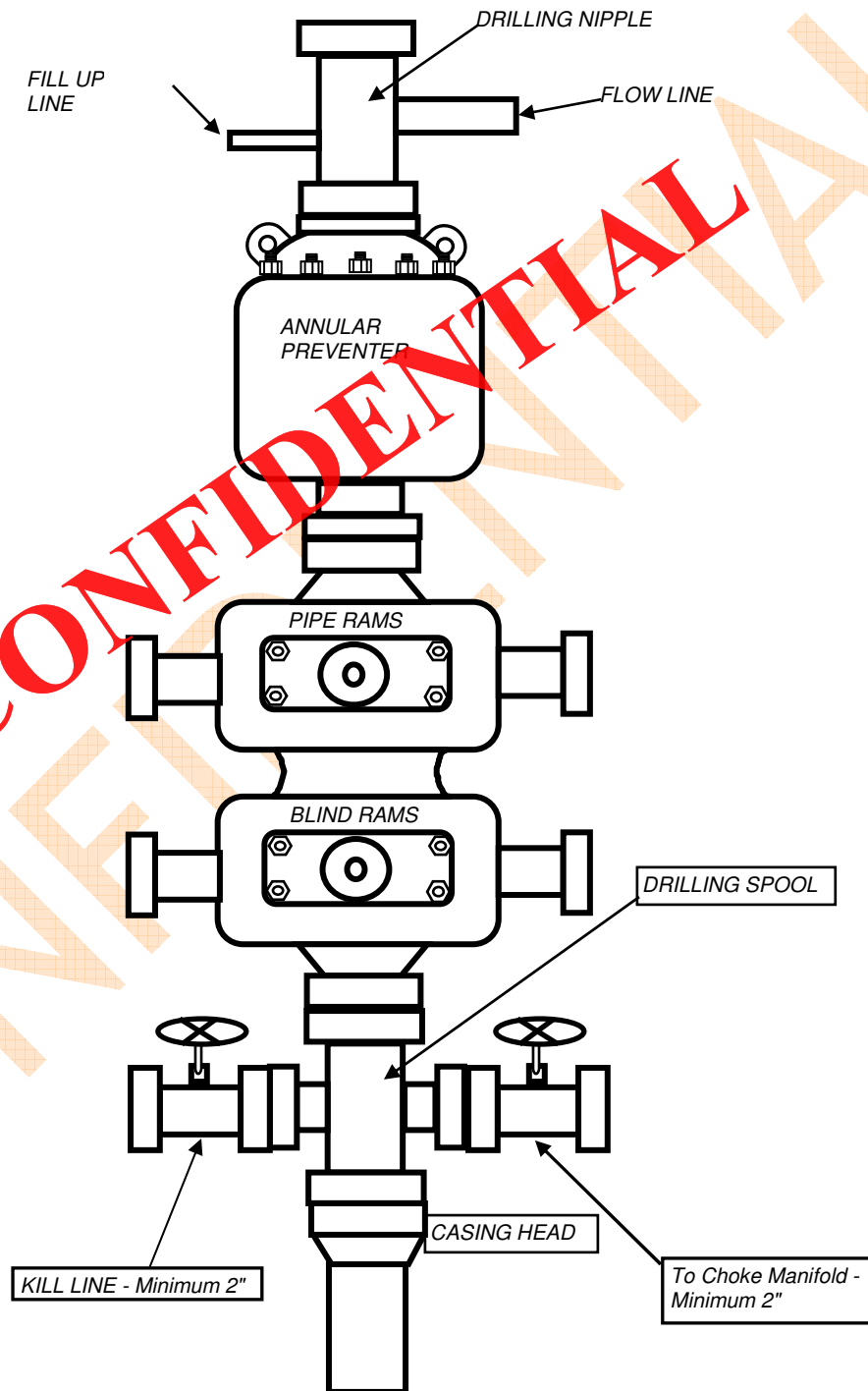
Logs:	Triple Combo	TD to base of surface casing (AIT, DSN, CDL) Base of surface casing to surface (GR only).
Cores:	None planned	
DST:	None planned	
Testing:	Operator plans no testing until the completion phase of the well.	

**8. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

- Operator anticipates Bottom Hole Temperatures below 150°F, the maximum temperature for DAP drilling fluids.
- No H<sub>2</sub>S has been encountered or is known to exist from previous drilling in the area at this depth.
- Maximum pressure for hydrocarbon bearing zones at native conditions in this area is approximately 1712.5 PSI (0.25 PSI/ft gradient).
- There exists in the area an abnormally pressured zone, at the approximate depth of the Trona marker (2816' MD). Pressure gradients up to 0.43 PSI/ft can be expected.

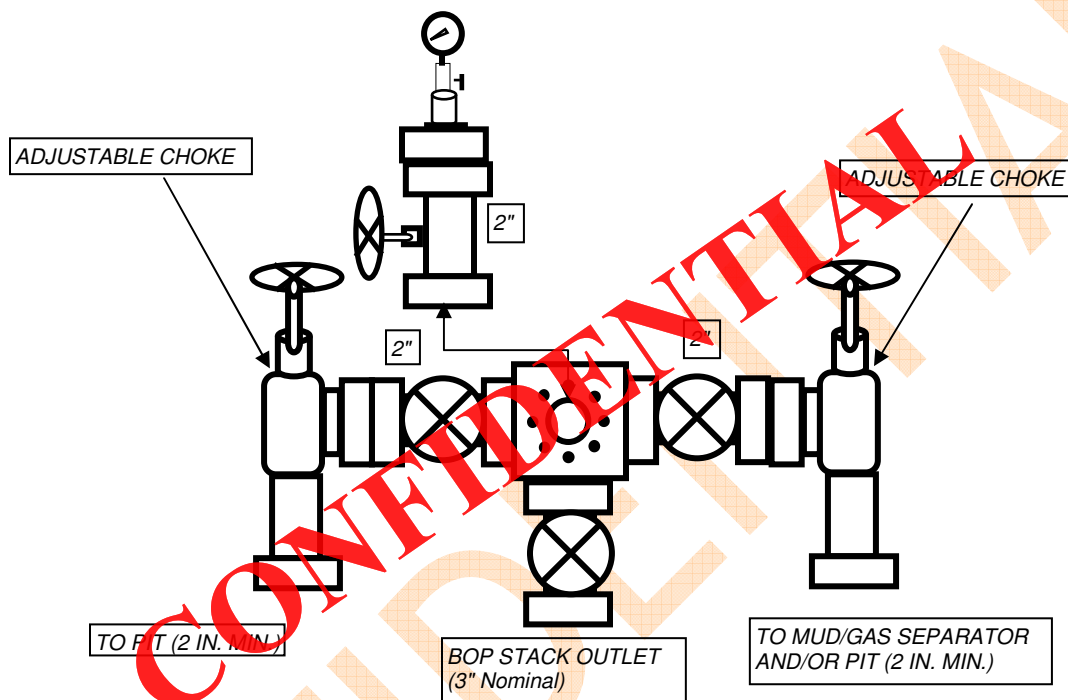
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**TYPICAL 2,000 p.s.i. BLOWOUT PREVENTER**



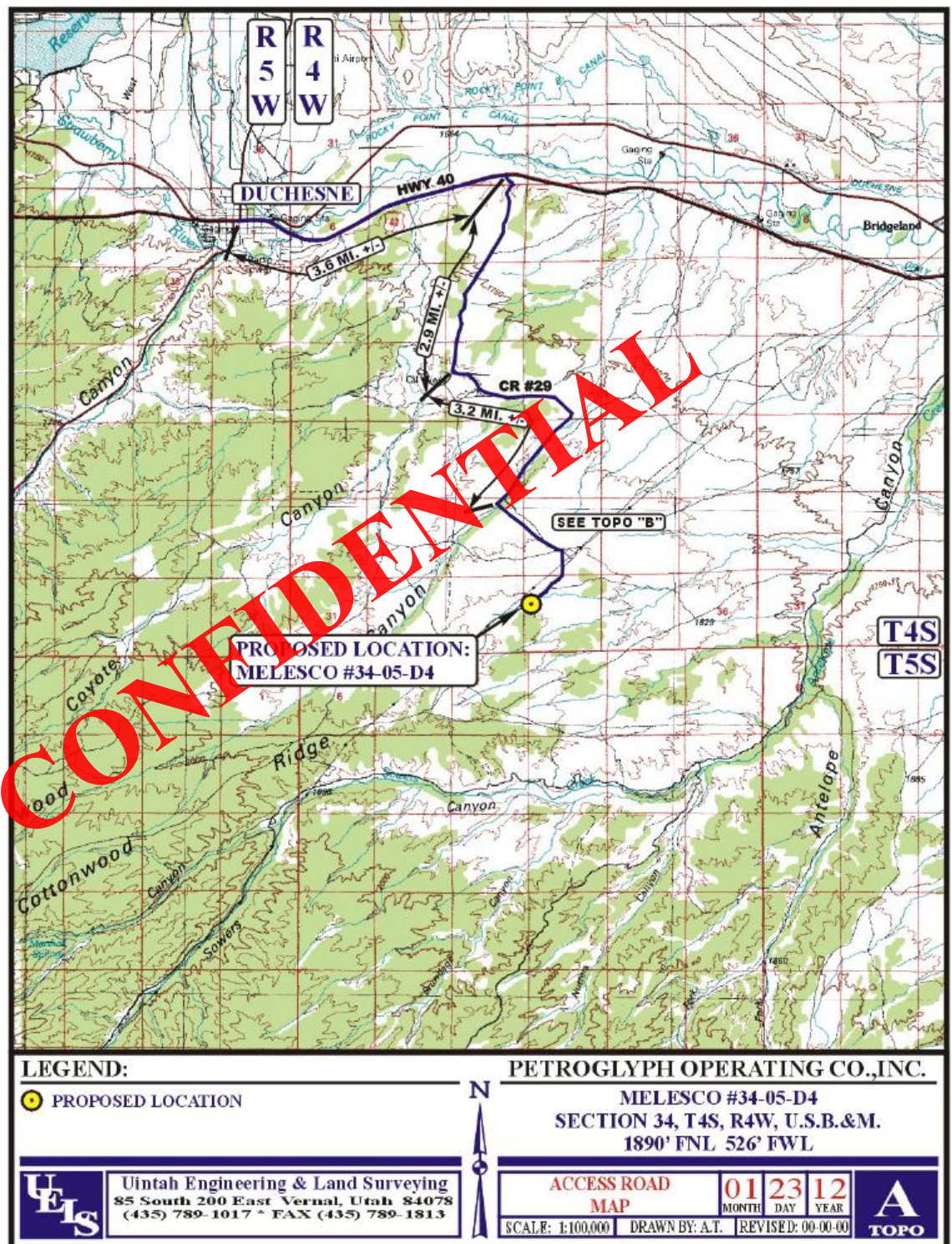


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**DUCHESNE COUNTY, UTAH**  
**TYPICAL 2,000 p.s.i. CHOKE MANIFOLD**











## SURFACE USE AGREEMENT

THIS Surface Use Agreement is made and entered into this 12 day of February, 2012 by and between **Petroglyph Operating Company, Inc.**, (Petroglyph), whose mailing address is P.O. Box 70019 Boise, ID 83707, and **Denmark L. Jensen**, whose address is 650 North 300 East Pleasant Grove, UT 84062 (Surface Owner).

WITNESSETH:

WHEREAS, Petroglyph Energy, Inc. is Lessee under a certain Oil and Gas Lease granted by David A. Melesco, Lessor, said Oil and Gas Lease dated May 20, 2008, recorded at Book M324 Page 93, records of Duchesne County, Utah covering the following lands in Duchesne County, Utah:

Township 4 South, Range 4 West, USB&M  
Section 34: N/2 320 acres, more or less

WHEREAS, **Denmark L. Jensen** is the present Surface Owner of a portion of said lands including Lots 94 and 95 of Phase 2 of the Moondance Ranch Subdivision, said lots situate within the N/2 of Section 34, T4S, R4W as shown on the plat attached hereto as Exhibit "A", and

WHEREAS, the parties hereto enter into this agreement to establish the terms under which Petroglyph, on behalf of Petroglyph Energy, Inc. shall conduct oil and gas exploration and development operations on said lands.

NOW THEREFORE, and in consideration of the sum of ten and more dollars (\$10.00 +) the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

For a period of five (5) years from the date of this agreement, Petroglyph may conduct all necessary operations for the drilling and producing of as many as two oil and gas exploration and development wells and construct the roads and pipelines necessary to service same on Surface Owner's lands. Petroglyph agrees to pay Surface Owner the sum of \$2,000.00 per well for inclusive wellsite damages, said payment to be made at the time of commencement of each well on said lands. In addition, Petroglyph will pay the sum of \$20.00 per rod for road and pipeline right of way (30 feet in width) for use in its operations on said lands and or used in conjunction with operations on adjoining lands, said sum payable as roads and pipelines are constructed. At the end of said five year period, Petroglyph's right to drill additional wells shall cease, but Petroglyph may continue to operate, service and maintain all wells, roads and pipelines then on said lands as long thereafter as said wells are capable of producing oil and or gas. Further, Petroglyph shall tender to Surface Owner an annual rental equal to \$1,000.00 for each well established on said lands, said amount due and payable on or before the anniversary date and subsequent anniversary dates of the initial wellsite damage payment, until such time as Petroglyph has plugged and abandoned the well(s), removed its equipment therefrom and has effected practicable restoration of the wellsite(s).

It is understood and agreed that Petroglyph may not conduct any exploration or drilling operations within 500 feet of Surface Owner's home site as shown on the attached Exhibit "A", and Petroglyph agrees to consult with surface owner as to the location of both wells and all roads and pipelines on said lands, and to post permanent signs to mark well sites and access roads. Petroglyph agrees to conduct its operations on all lands in keeping with good oil field standards and to maintain its wellsites, roads, and facilities in proper, safe and tidy condition. During drilling, completion, and re-completion operations on said lands, Petroglyph agrees, to promptly restore, clean and police the area affected, including, but not limited to pits and the like. Petroglyph agrees to construct all roads so as to reasonably minimize erosion, to effect practicable restoration of any lands used in its operations, and upon final cessation of operations, to promptly remove all equipment from the affected premises. Should Petroglyph fail in this regard, Petroglyph shall be liable to Surface Owner for Surface Owners cost in complying with these provisions.

When requested by Surface Owner, if necessary to prevent erosion, Petroglyph agrees to properly gravel all its roads and wellsite turnarounds on the leased premises. Petroglyph agrees to keep all noxious weeds, including but not limited to scotch thistle, under control on all areas disturbed by Petroglyph.

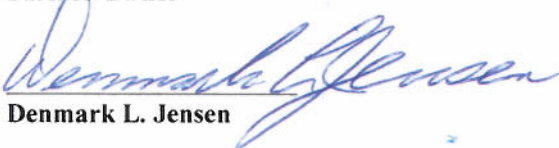
This Surface Use Agreement shall not be construed to diminish or limit in any way Petroglyph's right to the reasonable use of the surface pursuant to the terms and conditions of its Oil and Gas Leases. The rights and obligations of the parties hereunder shall extend to their respective heirs, devisees, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, this Surface Use Agreement has been executed as of the first date written above.

**Petroglyph Operating Company, Inc.**

by: \_\_\_\_\_

**Surface Owner**

  
**Denmark L. Jensen**

State of Idaho  
County of \_\_\_\_\_

BEFORE ME, the undersigned, a Notary Public, in and for said County and State, on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared \_\_\_\_\_ to me personally known, who, being by me duly sworn, did say that he is the President of said corporation and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said \_\_\_\_\_ acknowledged said instrument to be the free act and deed of said corporation.

Witness my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

My Commission expires: \_\_\_\_\_

\_\_\_\_\_  
Notary Public

SEAL

State of Utah  
County of ut

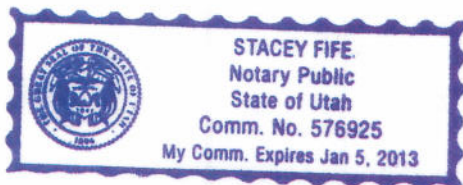
On this 23 day of February, 2012, before me, the undersigned Notary Public in and for said county and state, personally appeared **Denmark L. Jensen** known to me to be the person or persons whose name(s) are subscribed to the foregoing instrument, and acknowledged that the same was executed and delivered as his/her/their free and voluntary act for the purposes therein set forth. In witness whereof I hereunto set my hand and official seal as of the date hereinabove stated.

Witness my hand and seal this 23 day of February, 2012

My Commission Expires: Jan 5, 2013

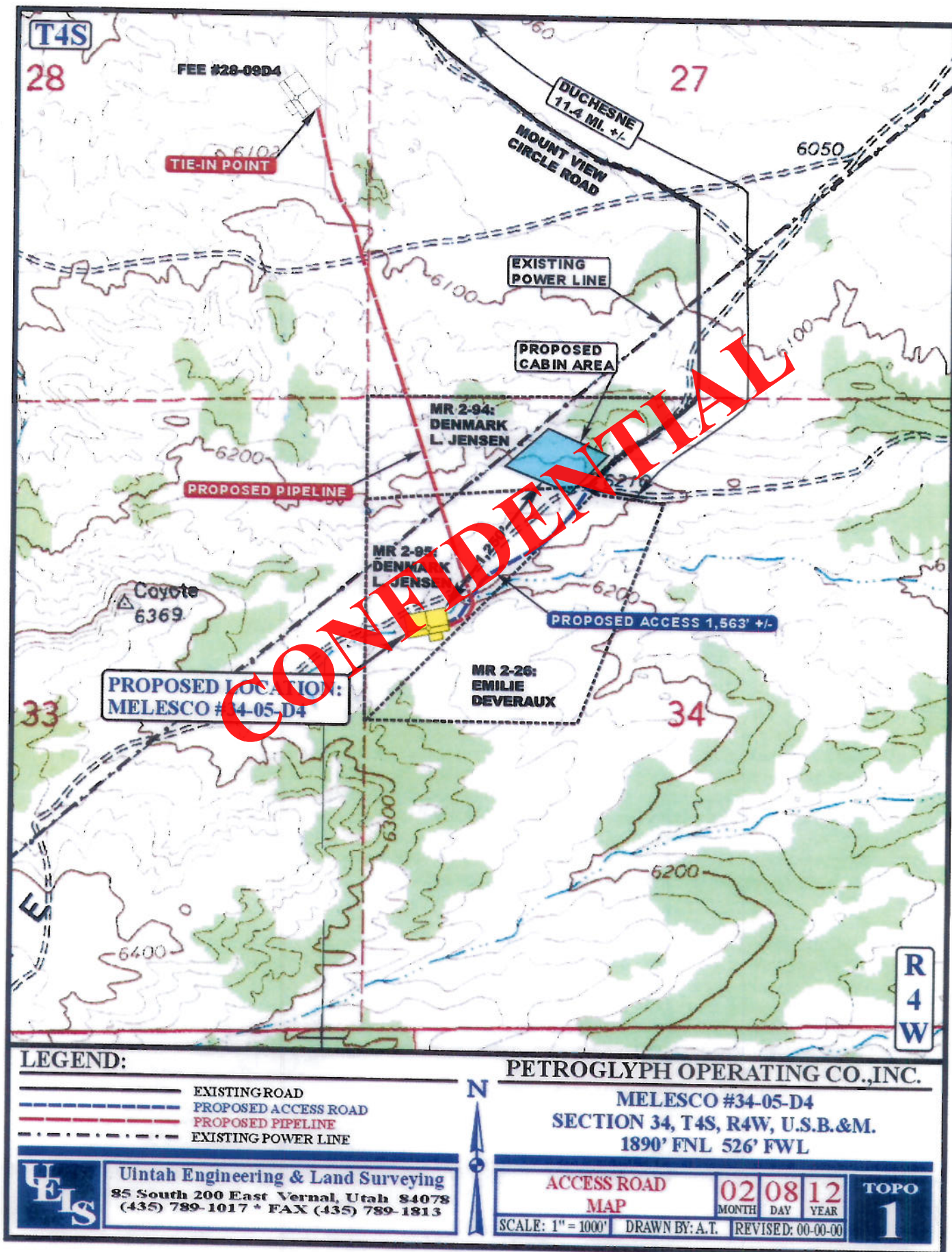
Stacey Fife  
Notary Public

SEAL





## EXHIBIT "A"



**Certification**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that presently exist; that the statements made in the Plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Petroglyph Operating Co., Inc. and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

Please be advised that Petroglyph Operating Co., Inc. is considered to be the operator of the **Melesco 34-05-D4 Well, located in SW/NW of Section 34, T4S, R4W, Duchesne County, Utah**, a FEE well. Petroglyph Operating Co., Inc is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond Coverage is provided under Bond #LP4138153.

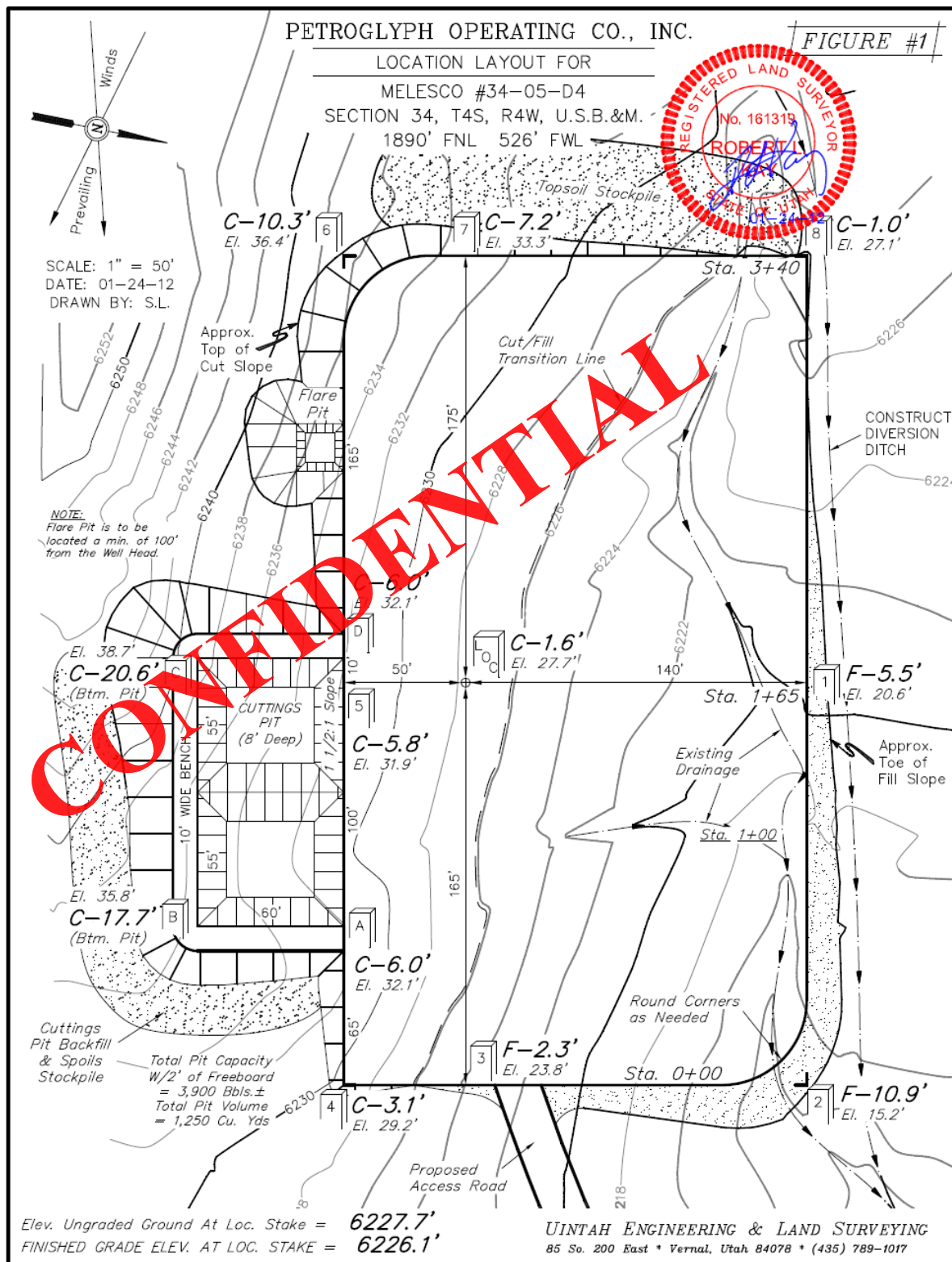
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August 13, 2012

Date

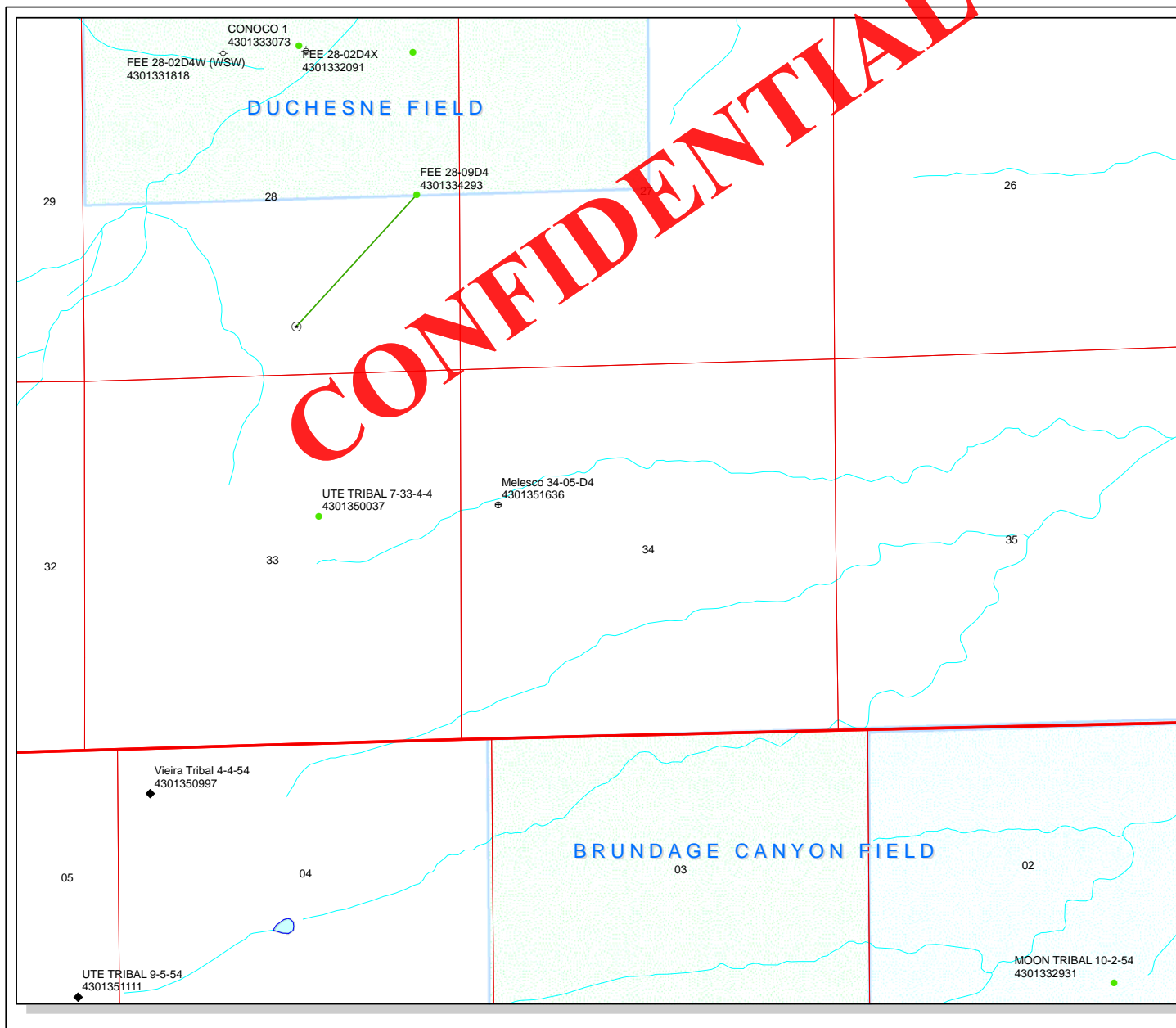
\_\_\_\_\_  
Ed Trotter

Agent

**CONFIDENTIAL**

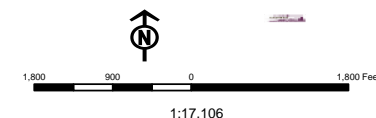
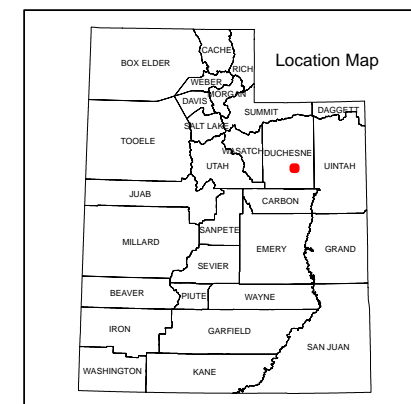






**API Number: 4301351636**  
**Well Name: Melesco 34-05-D4**  
**Township T04.0S Range R04.0W Section 34**  
**Meridian: UBM**  
**Operator: PETROGLYPH OPERATING CO**  
 Map Prepared:  
 Map Produced by Diana Mason

Units	Wells Query
<b>STATUS</b>	<b>Status</b>
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LOC - New Location
PI OIL	OPS - Operation Suspended
PP GAS	PA - Plugged Abandoned
PP GEOTHERM	PGW - Producing Gas Well
PP OIL	POW - Producing Oil Well
SECONDARY	SGW - Shut-in Gas Well
TERMINATED	SOW - Shut-in Oil Well
	TA - Temp. Abandoned
	TW - Test Well
	WDW - Water Disposal
	WW - Water Injection Well
	WSW - Water Supply Well
	Bottom Hole Location - O/Gas/Dls
<b>Fields</b>	
Unknown	
ABANDONED	
ACTIVE	
COMBINED	
INACTIVE	
STORAGE	
TERMINATED	



Well Name	PETROGLYPH OPERATING CO Melesco 34-05-D4 43013516360000			
String	COND	Surf	PROD	
Casing Size(in)	14.000	8.625	5.500	
Setting Depth (TVD)	55	700	6850	
Previous Shoe Setting Depth (TVD)	0	55	700	
Max Mud Weight (ppg)	8.4	8.4	10.0	
BOPE Proposed (psi)	0	500	2000	
Casing Internal Yield (psi)	1000	2950	4810	
Operators Max Anticipated Pressure (psi)	1713		4.8	

Calculations	COND String	14.000	"
Max BHP (psi)	.052*Setting Depth*MW=	24	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	17	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	12	NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	12	NO
Required Casing/BOPE Test Pressure=		55	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

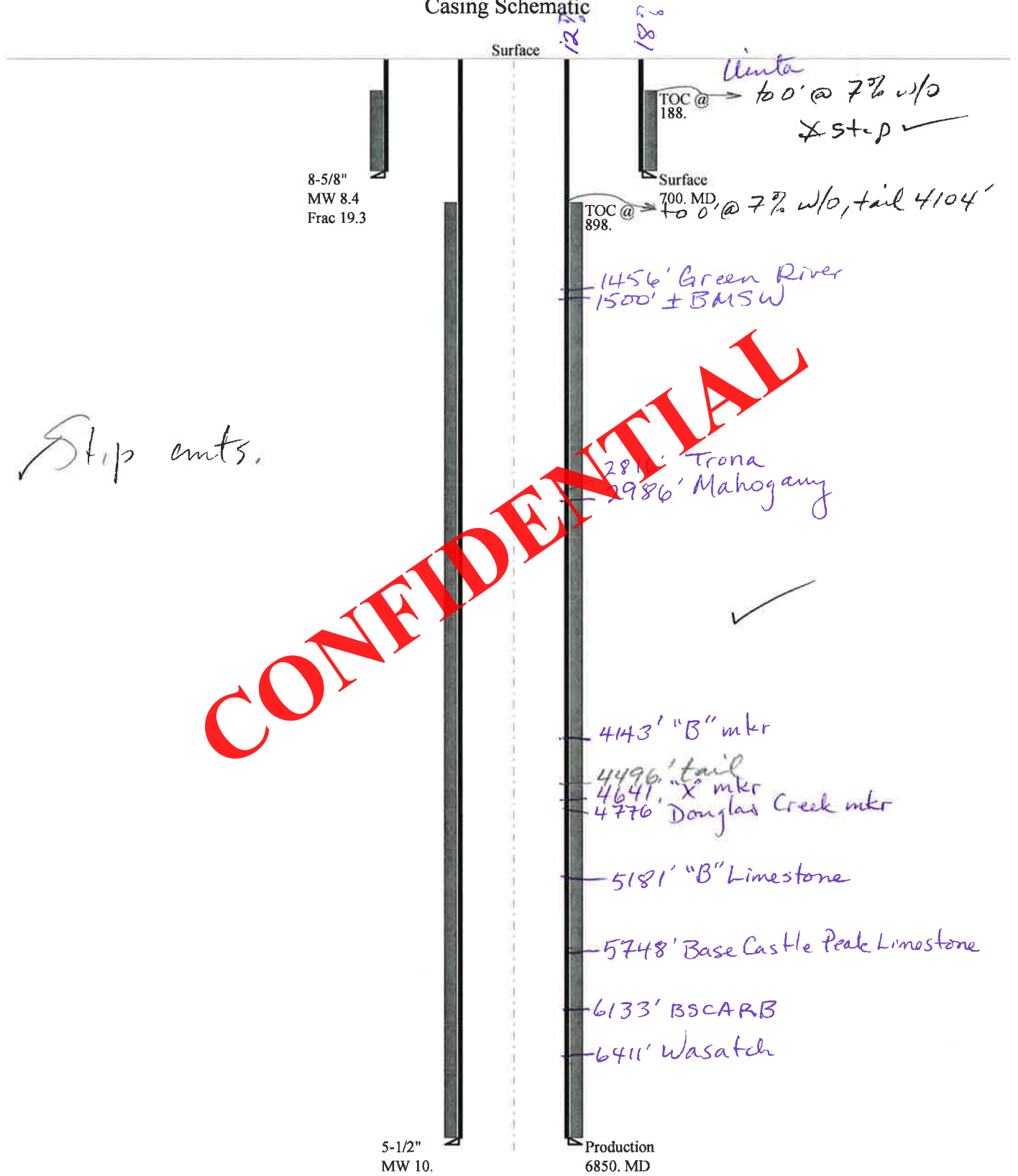
Calculations	Surf String	8.625	"
Max BHP (psi)	.052*Setting Depth*MW=	305	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	222	YES air mist
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	152	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	164	NO OK
Required Casing/BOPE Test Pressure=		700	psi
*Max Pressure Allowed @ Previous Casing Shoe=		55	psi *Assumes 1psi/ft frac gradient

Calculations	PROD String	5.500	"
Max BHP (psi)	.052*Setting Depth*MW=	3562	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	2740	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2055	NO OK, lower expected pressure
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	2209	NO Reasonable
Required Casing/BOPE Test Pressure=		2000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		700	psi *Assumes 1psi/ft frac gradient

Calculations	String		"
Max BHP (psi)	.052*Setting Depth*MW=		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

# 43013516360000 Melesco 34-05-D4

## Casing Schematic



Well name:	<b>43013516360000 Melesco 34-05-D4</b>	
Operator:	<b>PETROGLYPH OPERATING CO</b>	
String type:	Surface	Project ID: 43-013-51636
Location:	DUCHESNE COUNTY	

**Design parameters:****Collapse**

Mud weight: 8.400 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 84 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: 188 ft

**Burst**

Max anticipated surface pressure: 616 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 700 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.70 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.40 (B)

Tension is based on air weight.  
Neutral point: 612 ft

Completion type is subs  
Non-directional string.

**Re subsequent strings:**

Next setting depth: 6,850 ft  
Next mud weight: 10.000 ppg  
Next setting BHP: 3,558 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 700 ft  
Injection pressure: 700 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	700	8.625	24.00	J-55	ST&C	700	700	7.972	3603
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	305	1370	4.486	700	2950	4.21	16.8	244	14.53 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: September 20, 2012  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 700 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>43013516360000 Melesco 34-05-D4</b>	
Operator:	<b>PETROGLYPH OPERATING CO</b>	
String type:	Production	Project ID: 43-013-51636
Location:	DUCHESNE COUNTY	

**Design parameters:****Collapse**

Mud weight: 10.000 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 170 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: 898 ft

**Burst**

Max anticipated surface pressure: 2,051 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 3,558 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.50 (J)  
Premium: 1.50 (J)  
Body yield: 1.80 (B)

Tension is based on air weight.  
Neutral point: 5,814 ft

Completion type is subs  
Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	6850	5.5	15.50	J-55	LT&C	6850	6850	4.825	24187
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	3558	4040	1.135	3558	4810	1.35	106.2	217	2.04 J

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: September 11, 2012  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 6850 ft, a mud weight of 10 ppg. The casing is considered to be evacuated for collapse purposes.  
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

# **ON-SITE PREDRILL EVALUATION**

## **Utah Division of Oil, Gas and Mining**

**Operator** PETROGLYPH OPERATING CO  
**Well Name** Melesco 34-05-D4  
**API Number** 43013516360000      **APD No** 6610      **Field/Unit** UNDESIGNATED  
**Location:** SWNW      **Sec** 34      **Tw** 4.0S      **Rng** 4.0W      1890 FNL 526 FWL  
**1/4, 1/4**  
**GPS Coord (UTM)** 557035 4438242      **Surface Owner** Denmark L. Jensen

### **Participants**

Les Farnsworth & Ed Trotter (Petroglyph Operating); Dennis Ingram (DOGM)

### **Regional/Local Setting & Topography**

The proposed Melesco 34-05-D4 is a private well located in northeastern Utah, approximately seven miles northeast of the town of Duchesne, accessed through the Mini-Ranches and what is known as the "Duchesne Field" and along the western slopes of Cottonwood Ridge. The surface topography at the well site slopes in a northeasterly direction and drops gradually into a shallow drainage to the northwest. Cottonwood Ridge parallels this ridge and also runs in a northeasterly direction, and is most likely the nearest area with potential surface water. The topography in this general area is rolling hills with shallow draws or canyons in pinion/juniper habitat.

### **Surface Use Plan**

#### **Current Surface Use**

Recreational  
Wildlife Habitat  
Deer Winter Range

#### **New Road Miles**

0.3

#### **Well Pad**

**Width** 250      **Length** 340

#### **Src Const Material**

Onsite

#### **Surface Formation**

UNTA

**Ancillary Facilities** N

### **Waste Management Plan Adequate?**

### **Environmental Parameters**

**Affected Floodplains and/or Wetlands** N

#### **Flora / Fauna**

Pinion/juniper, sagebrush, greasewood, rabbit brush, winter fat, rice grass, prickly pear cactus.

Potential mule deer and elk winter range, coyote, fox, rabbit, birds of prey, and other smaller birds and mammals native to region.

#### **Soil Type and Characteristics**

Grey, fine grained sandy loam with some clays present

**Erosion Issues** Y

**Sedimentation Issues Y****Site Stability Issues N****Drainage Diversion Required? Y**

Existing dry wash to the north that will need re-routed further north to accommodate location.

**Berm Required? Y**

Location and tanks.

**Erosion Sedimentation Control Required? Y**

Probably will need erosion or sediment control along the northern corners because of existing, dry wash that will need re-routed further north.

**Paleo Survey Run?  
Resources? N****Paleo Potential Observed? N****Cultural Survey Run?****Cultural****Reserve Pit****Site-Specific Factors****Site Ranking**

<b>Distance to Groundwater (feet)</b>	>200	0
<b>Distance to Surface Water (feet)</b>	>1000	0
<b>Dist. Nearest Municipal Well (ft)</b>	>5280	0
<b>Distance to Other Wells (feet)</b>	>1320	0
<b>Native Soil Type</b>	High permeability	20
<b>Fluid Type</b>	Fresh Water	5
<b>Drill Cuttings</b>	Normal Rock	0
<b>Annual Precipitation (inches)</b>		0

**Affected Populations**

<b>Presence Nearby Utility Conduits</b>	Not Present	0
<b>Final Score</b>		25

Sensitivity Level

**Characteristics / Requirements**

Proposed reserve pit along the southeastern boundary of the location, in cut and downwind of the well head, measuring 60' wide, 100' long, and 8' deep.

**Closed Loop Mud Required? Liner Required? Y Liner Thickness 20 Pit Underlayment Required?****Other Observations / Comments**

Landowner invited and was coming but came up sick, landowner agreement in place, re-route dry wash further north.

Dennis Ingram  
Evaluator8/31/2012  
Date / Time



# Application for Permit to Drill

## Statement of Basis

### Utah Division of Oil, Gas and Mining

<b>APD No</b>	<b>API WellNo</b>	<b>Status</b>	<b>Well Type</b>	<b>Surf Owner</b>	<b>CBM</b>
6610	43013516360000	LOCKED	OW	P	No
<b>Operator</b>	PETROGLYPH OPERATING CO		<b>Surface Owner-APD</b>	Denmark L. Jensen	
<b>Well Name</b>	Melesco 34-05-D4		<b>Unit</b>		
<b>Field</b>	UNDESIGNATED		<b>Type of Work</b>	DRILL	
<b>Location</b>	SWNW 34 4S 4W U 1890 FNL (UTM) 557035E 4438247N		526 FWL GPS Coord		

#### Geologic Statement of Basis

Petroglyph proposes to set 55 feet of conductor and 495 feet of surface casing which will be cemented to surface. The surface hole will be drilled utilizing an air/mist system. The estimated depth to the base of moderately saline ground water is 1,500 feet. A search of Division of Water Rights records indicates that there are no water wells within a 10,000 foot radius of the center of Section 34. Production casing cement should be brought up to or above the base of the moderately saline ground water in order to isolate it from fresher waters up hole.

Brad Hill  
APD Evaluator

9/11/2012  
Date / Time

#### Surface Statement of Basis

A presite visit was made on August 31, 2012 to take input and address issues regarding the permitting and drilling of this well. Denmark Jensen was given as the landowner of record and therefore invited by the Division to participate in the onsite meeting. According to Petroglyph Operating, they have a landowner agreement in place.

The surface of this site slopes to the north and shows ten feet of cut along the southwestern corner number 6 and ten feet of fill at the northeast corner. A dry wash bed crosses the northern portion of this proposed pad at corner 8 and travels the length of this site, leaving the pad just inside corner number 2. The operator shall re-route this dry wash further north and beyond any fill from the construction area, which will straighten out and provide better drainage capabilities. Sediment and erosion from the fill along the northern portion of this pad shall be stabilized to prevent material from out washing into the dry wash. Topsoil storage for this site is to be scooped and stored along the western portion of this pad, corners 6 through 8. Any trees harvested from this disturbance shall also be stored for reclamation unless the landowner has request otherwise.

The operator shall install a 16 mil or greater, synthetic liner in the reserve pit to prevent seepage of the drilling fluids into underlying soils.

Dennis Ingram  
Onsite Evaluator

8/31/2012  
Date / Time

#### Conditions of Approval / Application for Permit to Drill

<b>Category</b>	<b>Condition</b>
Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.

Pits	The reserve pit should be located on the south side of the location.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.
Surface	Erosion protection shall be installed to prevent erosion and sediment materials from entering and blocking the wash to the north of the wellsite.
Surface	A dry wash north of this wellsite shall be diverted around the location.

**CONFIDENTIAL**

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 8/13/2012

API NO. ASSIGNED: 43013516360000

WELL NAME: Melesco 34-05-D4

OPERATOR: PETROGLYPH OPERATING CO (N3800)

PHONE NUMBER: 435 789-4120

CONTACT: Ed Trotter

PROPOSED LOCATION: SWNW 34 040S 040W

Permit Tech Review: ☒

SURFACE: 1890 FNL 0526 FWL

Engineering Review: ☒

BOTTOM: 1890 FNL 0526 FWL

Geology Review: ☒

COUNTY: DUCHESNE

LATITUDE: 40.09257

LONGITUDE: -110.33093

UTM SURF EASTINGS: 557035.00

NORTHINGS: 4438247.00

FIELD NAME: UNDESIGNATED

LEASE TYPE: 4 - Fee

LEASE NUMBER: FEE

PROPOSED PRODUCING FORMATION(S): WASATCH

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

- ☒ PLAT
- ☒ Bond: STATE - LPM4138153
- ☐ Potash
- ☐ Oil Shale 190-5
- ☐ Oil Shale 190-3
- ☐ Oil Shale 190-13
- ☒ Water Permit: 43-8342
- ☐ RDCC Review:
- ☒ Fee Surface Agreement
- ☐ Intent to Commingle

Commingle Approved

## LOCATION AND SITING:

- ☐ R649-2-3.
- Unit:
- ☐ R649-3-2. General
- ☐ R649-3-3. Exception
- ☒ Drilling Unit
- Board Cause No: R649-3-2
- Effective Date:
- Siting:
- ☐ R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 5 - Statement of Basis - bhill  
12 - Cement Volume (3) - hmadonald  
23 - Spacing - dmason  
25 - Surface Casing - hmadonald

RECEIVED: September 24, 2012



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

## Permit To Drill

\*\*\*\*\*

**Well Name:** Melesco 34-05-D4

**API Well Number:** 43013516360000

**Lease Number:** FEE

**Surface Owner:** FEE (PRIVATE)

**Approval Date:** 9/24/2012

### Issued to:

PETROGLYPH OPERATING CO, 960 Broadway Avenue, Ste 500, Bosie, ID 83703

### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-2. The expected producing formation or pool is the WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

### Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### Conditions of Approval:

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Cement volume for the 5 1/2 production string shall be determined from actual

hole diameter in order to place cement from the pipe setting depth back to surface as indicated in the submitted drilling plan.

Surface casing shall be cemented to the surface.

**Additional Approvals:**

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels  
OR  
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website  
at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program  
- contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

**Contact Information:**

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office  
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office  
801-231-8956 - after office hours

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or

plugging

**Approved By:**

A handwritten signature in black ink, appearing to read 'J. Rogers', written over a faint horizontal line.

For John Rogers  
Associate Director, Oil & Gas

## BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Craig's Bkt Rig  
Submitted By Rodrigo Jurado Phone Number 435-722-5302  
Well Name/Number Melesco 34-05-D4  
Qtr/Qtr SWNW Section 34 Township 4S Range 4W  
Lease Serial Number Fee  
API Number 43-013-51636

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 10/18/2012 08:00 AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

RECEIVED

OCT 17 2012

DIV. OF OIL, GAS &amp; MINING

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks We plan to spud and set 40' of 14" conductor. (Verbal notification given and notice sent 10/17/2012 @ 11:30 A.M.)



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: FEE
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: Melesco 34-05-D4	
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO	9. API NUMBER: 43013516360000	
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500, Bosie, ID, 83703	PHONE NUMBER: 208 685-7685 Ext	9. FIELD and POOL or WILDCAT: UNDESIGNATED
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1890 FNL 0526 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 34 Township: 04.0S Range: 04.0W Meridian: U	COUNTY: DUCHESNE	
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 10/19/2012			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

We spudded this well on 10/19/2012 at 12:30 P.M. We set 40' of 16" Conductor using Craig's Roustabout Service and their Bucket Rig.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 October 25, 2012

NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A		DATE 10/19/2012

CONFIDENTIAL

## BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Pro Petro Air Rig  
Submitted By Rodrigo Jurado Phone Number 435-722-5302  
Well Name/Number Melesco 34-05-D4  
Qtr/Qtr SWNW Section 34 Township 4S Range 4W  
Lease Serial Number Fee  
API Number 43-013-51636

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☒ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

RECEIVED

OCT 23 2012

DIV. OF OIL, GAS &amp; MINING

Date/Time 10/23/2012 02:00 AM ☒ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks We plan to run +/- 500' of 8-5/8" J-55 Casing.  
(Sent 10/22/2012 @ 8:45 A.M.)

CONFIDENTIAL

## BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Aztec #673  
Submitted By Kenny Gray Phone Number 970-361-3271  
Well Name/Number Melesco 34-05-D4  
Qtr/Qtr SWNW Section 34 Township 4S Range 4W  
Lease Serial Number Fee  
API Number 43-013-51636

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing  
☐ Intermediate Casing  
☐ Production Casing  
☐ Liner  
☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

BOPE

- ☒ Initial BOPE test at surface casing point  
☐ BOPE test at intermediate casing point  
☐ 30 day BOPE test  
☐ Other

RECEIVED

OCT 25 2012

DIV. OF OIL, GAS &amp; MINING

Date/Time 10/26/2012 11:00 AM ☐ PM ☐

Remarks \_\_\_\_\_  
\_\_\_\_\_

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: Petroglyph Operating Company Operator Account Number: N 3800  
Address: P.O. Box 607  
city Roosevelt  
state UT zip 84066 Phone Number: (435) 722-2531

Well 1 43 013 511636

API Number	Well Name		QQ	Sec	Twp	Rng	County
431351636	Malesco 34-05-D4		SWNW	34	4S	4W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
A	<u>new</u>	<u>10704</u>	10/19/2012		<u>10/31/12</u>		
Comments: <u>WSTE.</u>							

CONFIDENTIAL

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
Comments:							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
Comments:							

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Rodrigo Jurado

Name (Please Print)

Signature

Regulatory Compliance Spc

Title

10/19/2012

Date

RECEIVED

OCT 30 2012

## BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Aztec # 673  
Submitted By Kenny Gray Phone Number 970-361-3271  
Well Name/Number Melesco 34-05-D4  
Qtr/Qtr SWNW Section 34 Township 4S Range 4W  
Lease Serial Number Fee  
API Number 43-013-51636

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing  
☐ Intermediate Casing  
☒ Production Casing  
☐ Liner  
☐ Other

RECEIVED

OCT 30 2012

DIV. OF OIL, GAS &amp; MINING

Date/Time 10/31/2012 7:00 AM ☒ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point  
☐ BOPE test at intermediate casing point  
☐ 30 day BOPE test  
☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks 6600' 5 1/2" Csg.

## BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Aztec # 673  
Submitted By Kenny Gray Phone Number 970-361-3271  
Well Name/Number Melesco 34-5-D4  
Qtr/Qtr SWNW Section 34 Township 4S Range 4W  
Lease Serial Number Fee  
API Number 43-013-51636

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing  
☐ Intermediate Casing  
☒ Production Casing  
☐ Liner  
☐ Other

RECEIVED

NOV 01 2012

DIV. OF OIL, GAS &amp; MINING

Date/Time 11/02/2012 12:00 AM ☒ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point  
☐ BOPE test at intermediate casing point  
☐ 30 day BOPE test  
☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks Re send due to drilling deeper (6850')

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: FEE
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: Melesco 34-05-D4	
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO	9. API NUMBER: 43013516360000	
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500, Bosie, ID, 83703	PHONE NUMBER: 208 685-7685 Ext	9. FIELD and POOL or WILDCAT: UNDESIGNATED
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1890 FNL 0526 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 34 Township: 04.0S Range: 04.0W Meridian: U	COUNTY: DUCHESNE	
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <b>2/12/2013</b>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input checked="" type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On or around 2/12/2013, depending on equipment availability, Petroglyph Operating Company intends to perforate and fracture treat the following: 4306-10, 4330-44, 4666-70, 4826-37, 4980-84, 4989-92, 5072-77, 5382-90, 5790-5805, 5848-56, 5907-11, 6016-20 & 6535-56. All perforations will be made using Titan 3 1/8" perf guns containing 22.7 gram charges, 0.42" EHD, 23.54" TTP @ 4 spf @ 120\* phased. We will frac using Delta 140 15# gelled fluid containing 20/40 mesh sand and use Halliburton 8K Composite Plugs for isolation.

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

Date: January 31, 2013

By: *D. K. Duff*

NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A		DATE 1/18/2013



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> FEE
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well		<b>8. WELL NAME and NUMBER:</b> Melesco 34-05-D4
<b>2. NAME OF OPERATOR:</b> PETROGLYPH OPERATING CO		<b>9. API NUMBER:</b> 43013516360000
<b>3. ADDRESS OF OPERATOR:</b> 960 Broadway Avenue, Ste 500, Boise, ID, 83703		<b>9. FIELD and POOL or WILDCAT:</b> UNDESIGNATED
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1890 FNL 0526 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNW Section: 34 Township: 04.0S Range: 04.0W Meridian: U		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 3/1/2013	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. The date of first production for this well was 03/01/2013.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> March 12, 2013		
<b>NAME (PLEASE PRINT)</b> Rodrigo Jurado	<b>PHONE NUMBER</b> 435 722-5302	<b>TITLE</b> Regulatory & Compliance Spc
<b>SIGNATURE</b> N/A	<b>DATE</b> 3/10/2013	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> FEE
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> PETROGLYPH OPERATING CO		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 960 Broadway Avenue, Ste 500, Boise, ID, 83703		<b>8. WELL NAME and NUMBER:</b> Melesco 34-05-D4
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1890 FNL 0526 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNW Section: 34 Township: 04.0S Range: 04.0W Meridian: U		<b>9. API NUMBER:</b> 43013516360000
<b>PHONE NUMBER:</b> 208 685-7685 Ext		<b>9. FIELD and POOL or WILDCAT:</b> UNDESIGNATED
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 3/1/2013	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input checked="" type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Please see attached form.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> May 08, 2013		
<b>NAME (PLEASE PRINT)</b> Rodrigo Jurado	<b>PHONE NUMBER</b> 435 722-5302	<b>TITLE</b> Regulatory & Compliance Spc
<b>SIGNATURE</b> N/A	<b>DATE</b> 5/1/2013	

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
2. NAME OF OPERATOR: Petroglyph Operating Company Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: P.O. Box 607 CITY Roosevelt STATE UT ZIP 84066		7. UNIT or CA AGREEMENT NAME:
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1890' FNL, 526' FWL		8. WELL NAME and NUMBER: Melesco 34-05-D4
PHONE NUMBER: (435) 722-2531		9. API NUMBER: 4301351636
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 34 4S 4W U		10. FIELD AND POOL, OR WILDCAT: Undesignated
COUNTY: Duchesne		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input checked="" type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 3/1/2013	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On 2/5/13 Petroglyph Operating ran GR/CBL and found ETOC@ 275'. On 2/12/2013 we perforated the following: 6535-56, 6277-79, 6258-62, 6242-44, 6237-40, 6218-22, 6211-13, 6207-09, 6199-6202, 6016-20, 5907-11, 5848-56, 5790-5805, 5382-90, 5072-77, 4989-92, 4980-84, 4826-37, 4666-70, 4330-44, 4311-18, 4306-10. Using Halliburton 8K Composite plugs for isolation, we frac'd and treated the following :

6535-6556: 705 Bbls fluid cont 50,160#'s of sand,  
6199-6279: 960 Bbls 15% Hcl gelled acid w/ 132 Bbl fresh water over flush,  
6016-6020: 359 Bbls fluid cont 13,460#'s of sand,  
5790-5911: 833 Bbls fluid cont 60,040#'s of sand,  
5382-5390: 1561 Bbls fluid cont 23,120#'s of sand,  
4980-5077: 446 Bbls fluid cont 90,220#'s of sand,  
4826-4837: 524 Bbls fluid cont 30,000#'s of sand,  
4666-4670: 371 Bbls fluid cont 12,000#'s of sand,  
4306-4344: 580 Bbls fluid cont 31,000#'s of sand.

We frac'd using Dyna HT 25 15# gelled fluid containing 20/40 Mesh Sand. We perforated using Titan 3-1/8" perf guns containing 22.7 gram charges, 0.42" EHD, 23.54" TTP @ 4 spf @ 120\* phased. All plugs were drilled out and cleaned out to 6799', PBTD. The well was swabbed until a good oil cut was seen then put to pump on 3/1/2013.

NAME (PLEASE PRINT) <u>Rodrigo Jurado</u>	TITLE <u>Regulatory Compliance Spc.</u>
SIGNATURE <u>Rodrigo Jurado</u>	DATE <u>5/1/2013</u>

(This space for State use only)

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ FORM 8  
(highlight changes)

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL:		OIL WELL <input checked="" type="checkbox"/>	GAS WELL <input type="checkbox"/>	DRY <input type="checkbox"/>	OTHER _____	5. LEASE DESIGNATION AND SERIAL NUMBER: <b>Fee</b>
b. TYPE OF WORK:		NEW WELL <input checked="" type="checkbox"/>	HORIZ. LATS. <input type="checkbox"/>	DEEP-EN <input type="checkbox"/>	RE-ENTRY <input type="checkbox"/>	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
		DIFF. RESVR. <input type="checkbox"/>	OTHER _____			7. UNIT or CA AGREEMENT NAME
2. NAME OF OPERATOR: <b>Petroglyph Operating Company, Inc.</b>						8. WELL NAME and NUMBER: <b>Melesco 34-05-D4</b>
3. ADDRESS OF OPERATOR: <b>P.O. Box 607</b> CITY <b>Roosevelt</b> STATE <b>UT</b> ZIP <b>84066</b>					PHONE NUMBER: <b>(435) 722-2531</b>	9. API NUMBER: <b>4301351636</b>
4. LOCATION OF WELL (FOOTAGES)						10. FIELD AND POOL, OR WILDCAT <b>Undesignated</b>
AT SURFACE: <b>1890' FNL 526' FWL</b>						11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWNW 34 4S 4W U</b>
AT TOP PRODUCING INTERVAL REPORTED BELOW: <b>1899' FNL 515' FWL</b>						12. COUNTY <b>Duchesne</b>
AT TOTAL DEPTH: <b>1919' FNL 507' FWL</b>						13. STATE <b>UTAH</b>
14. DATE SPUDDED: <b>10/19/2012</b>	15. DATE T.D. REACHED: <b>10/30/2012</b>	16. DATE COMPLETED: <b>3/6/2013</b>	ABANDONED <input type="checkbox"/>		READY TO PRODUCE <input checked="" type="checkbox"/>	17. ELEVATIONS (DF, RKB, RT, GL): <b>6240' RKB</b>
18. TOTAL DEPTH: MD <b>6,600</b> TVD <b>6,600</b>		19. PLUG BACK T.D.: MD <b>6,758</b> TVD <b>6,758</b>		20. IF MULTIPLE COMPLETIONS, HOW MANY? *		21. DEPTH BRIDGE MD PLUG SET: TVD
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) <b>ACTR, SDDSN, Borehole Volume Plot, Cement Bond Log</b>					23. WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy)	

### 24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20	16 J-55	75	0	54				0	Conductor
12.25	8.625 J-55	24	0	520		G 325	67	0	
7.875	5.5 J-55	15.5	0	6,842		G 860	262	275' CBL	

### 25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2.875	6,600							

### 26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) Green River	4,306	6,269	4,306	6,269	4,306 - 6,269	0.42	360	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B) Wasatch	6,535	6,556	6,535	6,556	6,535 - 6,556	0.42	84	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

### 27. PERFORATION RECORD

### 28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
6,535'-6,556'	705 Bbls of Dyna HT 25 15# gelled fluid containing 50,160#'s of 20/40 Mesh Sand.
6,199'-6,279'	960 Bbls of 15% Hcl gelled acid with 132 Bbls fresh water over flush.
4,306'-6,020'	4,674 Bbls of Dyna HT 25 15# gelled fluid containing 259,840#'s of 20/40 Mesh Sand

### 29. ENCLOSED ATTACHMENTS:

- |   |  |  |  |
|---|--|--|--|
| <input checked="" type="checkbox"/> ELECTRICAL/MECHANICAL LOGS              | <input type="checkbox"/> GEOLOGIC REPORT | <input type="checkbox"/> DST REPORT                            | <input checked="" type="checkbox"/> DIRECTIONAL SURVEY |
| <input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION | <input type="checkbox"/> CORE ANALYSIS   | <input checked="" type="checkbox"/> OTHER: <u>UDOGM Form 7</u> |  |

### 30. WELL STATUS:

**POW**

## 31. INITIAL PRODUCTION

## INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 3/1/2013	TEST DATE: 4/11/2013	HOURS TESTED: 24	TEST PRODUCTION RATES: →	OIL – BBL: 50	GAS – MCF: 47	WATER – BBL: 60	PROD. METHOD: Rod Pump
CHOKE SIZE: 28/64	TBG. PRESS. 1,200	CSG. PRESS. 1,219	API GRAVITY 40.60	BTU – GAS 1	GAS/OIL RATIO 940	24 HR PRODUCTION RATES: →	INTERVAL STATUS: Open

## INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## 32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

Used for Fuel

## 33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				mahogany	2,968
				Garden Gulch	3,712
				B Marker	4,143
				X Marker	4,644
				Y Marker	4,668
				Douglas Creek	4,784
				B Lime	5,191
				Castle Peak	5,718
				Basal Carb	6,148
				Wasatch	6,423

## 35. ADDITIONAL REMARKS (Include plugging procedure)

Please see NOI and Subsequent Frac Sundry for a more detailed record of Frac and Perf info.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Rodrigo JuradoTITLE Regulatory Compliance SpecialistSIGNATURE DATE 5/2/2013

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 7

## REPORT OF WATER ENCOUNTERED DURING DRILLING

Well name and number: Melesco 34-05-D4API number: 4301351636Well Location: QQ SWNW Section 34 Township 4S Range 4W County DuchesneWell operator: Petroglyph Operating Company, Inc.Address: P.O. Box 607city Roosevelt state UT zip 84066Phone: (435) 722-2531Drilling contractor: ProPetro ServiceAddress: 1422 East 1500 Southcity Vernal state UT zip 84078Phone: (435) 789-4729

Water encountered (attach additional pages as needed):

DEPTH		VOLUME (FLOW RATE OR HEAD)	QUALITY (FRESH OR SALTY)
FROM	TO		
0	510	0	No Water Encountered

Formation tops:  
(Top to Bottom)

1	2	3
4	5	6
7	8	9
10	11	12

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

I hereby certify that this report is true and complete to the best of my knowledge.

NAME (PLEASE PRINT) Rodrigo JuradoTITLE Regulatory Compliance SpcSIGNATURE DATE 10/24/2012





Job Number: UT121028

Company: Petroglyph

Lease/Well: Melesco 34-05-D4

Location: Sec. 34, T4S, R4W

Rig Name: Aztec 673

RKB: 14.5

G.L. or M.S.L.: MSL

State/Country: UT/USA

Declination: 11.25

Grid: True

File name: C:\WINSERVE\UT121028.SVY

Date/Time: 30-Oct-12 / 05:34

Curve Name: Actual

## Payzone Directional

## WINSERVE SURVEY CALCULATIONS

Minimum Curvature Method

Vertical Section Plane .00

Vertical Section Referenced to Wellhead

Rectangular Coordinates Referenced to Wellhead

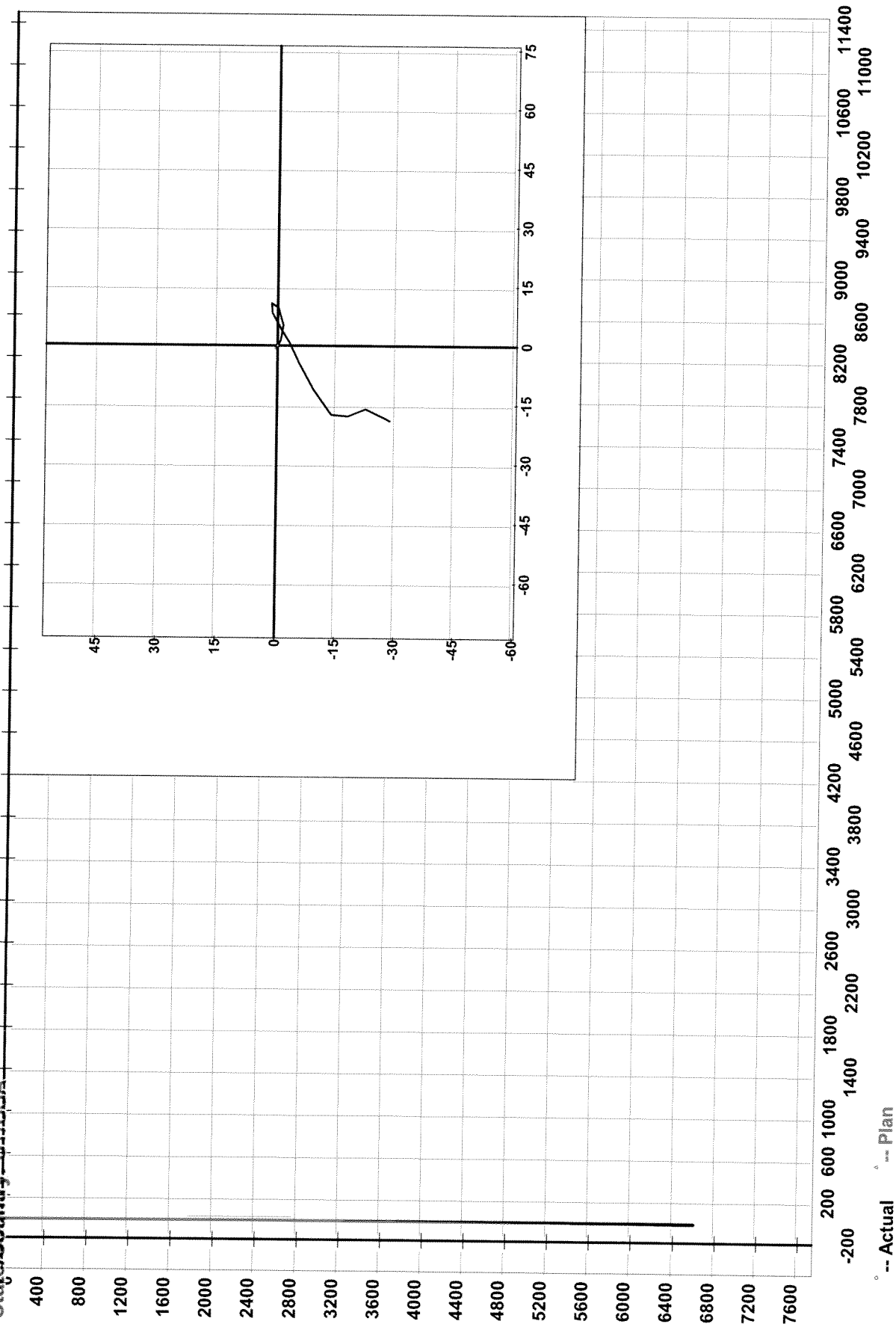
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
556.00	.31	120.19	556.00	-.76	1.30	-.76	1.50	120.19	.06
1015.00	.70	90.62	1014.98	-1.41	5.18	-1.41	5.37	105.25	.10
1512.00	.44	44.91	1511.96	-.09	9.56	-.09	9.56	90.55	.10
2007.00	.09	328.84	2006.95	1.59	10.70	1.59	10.82	81.57	.09
2504.00	.53	256.07	2503.94	1.37	8.27	1.37	8.38	80.61	.10
2999.00	.66	229.70	2998.92	-1.03	3.87	-1.03	4.01	104.87	.06
3496.00	.26	259.15	3495.90	-3.09	.58	-3.09	3.15	169.36	.09
3993.00	.97	241.44	3992.87	-5.32	-4.22	-5.32	6.79	218.46	.15
4490.00	.83	240.91	4489.81	-9.08	-11.06	-9.08	14.31	230.63	.03
4987.00	1.00	229.44	4986.75	-13.65	-17.50	-13.65	22.19	232.06	.05
5484.00	.75	115.62	5483.71	-17.87	-17.86	-17.87	25.27	224.99	.30

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
5980.00	.75	200.13	5979.68	-22.33	-16.05	-22.33	27.50	215.72	.20
6476.00	.57	210.45	6475.65	-27.50	-18.42	-27.50	33.10	213.82	.04
<b>Last Survey Projected to TD</b>									
6600.00	.57	207.42	6599.64	-28.58	-19.02	-28.58	34.33	213.64	.02



Job Number: UT121028  
 Company: Petroglyph  
 Lease/Well: Melesco 34-05-D4  
 Location: Sec. 34, T4S, R4W  
 Rig Name: Aztec 673  
 State/Country: UT/USA

Declination: 11.25  
 Grid: True



**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☒  
(highlight changes)

FORM 8

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

<b>1a. TYPE OF WELL:</b> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> Fee
<b>b. TYPE OF WORK:</b> NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</b>
<b>2. NAME OF OPERATOR:</b> Petroglyph Operating Company, Inc.		<b>7. UNIT or CA AGREEMENT NAME</b>
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 607 CITY Roosevelt STATE UT ZIP 84066		<b>8. WELL NAME and NUMBER:</b> Melesco 34-05-D4
<b>4. LOCATION OF WELL (FOOTAGES):</b> AT SURFACE: 1890' FNL 526' FWL  AT TOP PRODUCING INTERVAL REPORTED BELOW: 1899' FNL 515' FWL  AT TOTAL DEPTH: 1919' FNL 507' FWL		<b>9. API NUMBER:</b> 4301351636
<b>10. FIELD AND POOL, OR WILDCAT</b> Undesignated		<b>11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> SWNW 34 4S 4W U
<b>12. COUNTY</b> Duchesne		<b>13. STATE</b> UTAH

<b>14. DATE SPUDDED:</b> 10/19/2013	<b>15. DATE T.D. REACHED:</b> 10/30/2013	<b>16. DATE COMPLETED:</b> 3/6/2013	ABANDONED <input type="checkbox"/> READY TO PRODUCE <input checked="" type="checkbox"/>	<b>17. ELEVATIONS (DF, RKB, RT, GL):</b> 6240' RKB
<b>18. TOTAL DEPTH MD</b> 6,850 TVD 6,849	<b>19. PLUG BACK T.D. MD</b> 6,758 TVD 6,758	<b>20. IF MULTIPLE COMPLETIONS, HOW MANY? *</b>		<b>21. DEPTH BRIDGE MD</b> PLUG SET: TVD
<b>22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)</b> ACTR, SDDSN, Borehole Volume Plot, Cement Bond Log			<b>23.</b> WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy)	

**24. CASING AND LINER RECORD (Report all strings set in well)**

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20	16 J-55	75	0	54				0	Conductor
12.25	5.625 J-55	24	0	520		G 325	67	0	
7.875	5.5 J-55	15.5	0	6,842		G 860	262	275' CBL	

**25. TUBING RECORD**

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2.875	6,600							

**26. PRODUCING INTERVALS**

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) Green River	4,306	6,269	4,306	6,269	4,306 6,269	0.42	360	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B) Wasatch	6,535	6,556	6,535	6,556	6,535 6,556	0.42	84	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

**27. PERFORATION RECORD****28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.**

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
6,535'-6,556'	705 Bbls of Dyna HT 25 15# gelled fluid containing 50,160#s of 20/40 Mesh Sand.
6,199'-6,279'	960 Bbls of 15% Hcl gelled acid with 132 Bbls fresh water over flush.
4,306'-6,020'	4,674 Bbls of Dyna HT 25 15# gelled fluid containing 259,840#s of 20/40 Mesh Sand.

**29. ENCLOSED ATTACHMENTS:**

- ☒ ELECTRICAL/MECHANICAL LOGS      ☐ GEOLOGIC REPORT      ☐ DST REPORT      ☐ DIRECTIONAL SURVEY  
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION      ☐ CORE ANALYSIS      ☒ OTHER: UDOGM Form 7

**30. WELL STATUS:**

POW

## 31. INITIAL PRODUCTION

## INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 3/1/2013	TEST DATE: 4/11/2013	HOURS TESTED: 24	TEST PRODUCTION RATES: →	OIL – BBL: 50	GAS – MCF: 47	WATER – BBL: 60	PROD. METHOD: Rod Pump
CHOKE SIZE: 28/64	TBG. PRESS. 1,200	CSG. PRESS. 1,219	API GRAVITY 40.60	BTU – GAS 1	GAS/OIL RATIO 940	24 HR PRODUCTION RATES: →	INTERVAL STATUS: Open

## INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## 32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

Used for Fuel

## 33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				Mahogany	2,968
				Garden Gulch	3,712
				B Marker	4,143
				X Marker	4,644
				Y Marker	4,668
				Douglas Creek	4,784
				B Lime	5,191
				Castle Peak	5,718
				Basal Carb	6,148
				Wasatch	6,426

## 35. ADDITIONAL REMARKS (Include plugging procedure)

Please see NOI and Subsequent Frac Sundry for a more detailed record of Frac and Perf info.

## 36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Rodrigo JuradoTITLE Regulatory Compliance Spc.SIGNATURE DATE 6/24/2013

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- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

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STATE OF UTAH  
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FORM 7

## REPORT OF WATER ENCOUNTERED DURING DRILLING

Well name and number: Melesco 34-05-D4API number: 4301351636Well Location: QQ SWNW Section 34 Township 4S Range 4W County DuchesneWell operator: Petroglyph Operating Company, Inc.Address: P.O. Box 607city Roosevelt state UT zip 84066Phone: (435) 722-2531Drilling contractor: ProPetro ServiceAddress: 1422 East 1500 Southcity Vernal state UT zip 84078Phone: (435) 789-4729

Water encountered (attach additional pages as needed):

DEPTH		VOLUME (FLOW RATE OR HEAD)	QUALITY (FRESH OR SALTY)
FROM	TO		
0	510	0	No Water Encountered

Formation tops:  
(Top to Bottom)

1	2	3
4	5	6
7	8	9
10	11	12

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

I hereby certify that this report is true and complete to the best of my knowledge.

NAME (PLEASE PRINT) Rodrigo JuradoTITLE Regulatory Compliance SpcSIGNATURE DATE 10/24/2012





Job Number: UT121028

Company: Petroglyph

Lease/Well: Melesco 34-05-D4

Location: Sec. 34, T4S, R4W

Rig Name: Aztec 673

RKB: 14.5

G.L. or M.S.L.: MSL

State/Country: UT/USA

Declination: 11.25

Grid: True

File name: C:\WINSERVE\UT121028.SVY

Date/Time: 30-Oct-12 / 05:34

Curve Name: Actual

## Payzone Directional

## WINSERVE SURVEY CALCULATIONS

Minimum Curvature Method

Vertical Section Plane .00

Vertical Section Referenced to Wellhead

Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
556.00	.31	120.19	556.00	-.76	1.30	-.76	1.50	120.19	.06
1015.00	.70	90.62	1014.98	-1.41	5.18	-1.41	5.37	105.25	.10
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6476.00	.57	210.45	6475.65	-27.50	-18.42	-27.50	33.10	213.82	.04
<b>Last Survey Projected to TD</b>									
6600.00	.57	207.42	6599.64	-28.58	-19.02	-28.58	34.33	213.64	.02

Job Number: UT121028  
 Company: Petroglyph  
 Lease/Well: Melesco 34-05-D4  
 Location: Sec. 34, T4S, R4W  
 Rig Name: Aztec 673  
 State/Country: UT/USA

Declination: 11.25  
 Grid: True

